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Title: ORAL HISTORY INTERVIEW WITH
GEN. ROBERT T. MARSH

Date(s): 18 SEP 1991

Call: KL68.03-286 Volume: N/A

IRIS: 1130145

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HEADQUARTERS AIR FORCE SYSTEMS COMMAND
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REPLY TO
ATTN OF:

HO

SUBJECT:

Gen Robert T. Marsh Interviews

TO:

Dr C. Joe Gross
HQ USAF/HOX
The Pentagon, Rm 5D1018
Washington, DC 20330-5000

Attached are the interviews you requested. I'm going to contact General Marsh as we discussed earlier and try to encourage him to review the interviews and send us his release. I'll keep you posted.

BW

BEVERLY S. FOLLIS, Lt Col, USAFR
Chief, Office of History

2 Atchs

1. Tape and Transcript Access Agreement (blank)
2. Draft AFSC Oral History Interviews w/Gen R.T. Marsh, dates from 26 Jul 84-10 Jul 85

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RETURN TO
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The following stipulations constitute the agreement regarding the tape(s) and transcript(s) resulting from the interview session(s) that I participated in with representatives of the Air Force Historical Program on _____
Day Month Year

(Please initial the appropriate spaces.)

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Interviewee's Signature

Date

Witness' Signature

Date

(SECURITY CLASSIFICATION AS REQUIRED)



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301-1400

LIC AFFAIRS

MEMORANDUM FOR DR. JOE GROSS

SUBJECT: Introduction to Oral History of General Marsh

As promised, here--finally--is my recommendation for your introduction on General Marsh. I would recommend that you use the attached in addition to your introduction. This would replace the pentultimate paragraph in your introduction. I recognize that this now makes your piece longer than it was, but that may be okay considering the scope of General Marsh's contributions to the Air Force and the fact that they are destined to remain under-recognized by any except those of us who were there.

Phil Lacombe, Lt Col, USAF

SPEECHWRITER TO THE
SECRETARY OF DEFENSE

Attachment

AIR FORCE SYSTEMS COMMAND

ORAL HISTORY INTERVIEW

of

GEN ROBERT T. MARSH, USAF (RET)

by

Dr Charles J. Gross and Mr Walter L. Kraus

Dates: 26 July 1984
4 December 1984
11 February 1985
12 April 1985
29 May 1985
10 July 1985

Locations: Andrews AFB, DC
Alexandria, VA

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INTRODUCTION

Gen Robert T. Marsh served as the Commander of Air Force Systems Command (AFSC) from 1 February 1981 until his retirement on 31 July 1984. Most of his forty-one year military career was devoted to Air Force research, development and weapons acquisition. General Marsh was born on 3 January 1925 in Logansport, Indiana. After graduating from Logansport High School in 1942, he attended Wabash College and was inducted into the Army Air Forces (AAF) in August 1943. As an enlisted man, he was trained both as an aircraft mechanic and a gunner on B-17s and B-24s. In July 1945, he received an appointment to the United States Military Academy. He graduated four years later and was commissioned as a second lieutenant in the U.S. Air Force (USAF). Marsh then attended the Air Tactical School at Tyndall Air Force Base (AFB), Florida and entered preliminary technical training at the Atomic Weapons and Radiological Safety School at Keesler AFB, Mississippi. In July 1950, he became an atomic weapons assembly officer at Sandia Base, New Mexico. Later, he joined an atomic weapons assembly and storage squadron which moved to Sidi Slimane Air Base, Morocco in 1951. On 5 January 1951, he was promoted to first lieutenant. That December, Marsh was transferred to Headquarters 7th Air Division, Strategic Air Command (SAC), in South Ruislip, England. He served there as an armament and electronics staff officer. His next promotion, to captain, was effective on 1 April 1953. In September 1954, he began graduate studies at the University of Michigan, earning masters degrees in instrumentation engineering and aeronautical engineering two years later. He was part of a special space science and technology program established for the Air Force by the university.

Marsh next served at Headquarters, Air Research and Development Command (ARDC) as a project officer on the Navaho and Matador/Mace missile systems from July 1956 to August 1959. His duty station was at Wright-Patterson AFB, Ohio. On 28 April 1959, he was promoted to major. After attending the Air Command and Staff College at Maxwell AFB,

Alabama, from September 1959 to July 1960, Marsh was reassigned to the Ballistic Missile Division (later redesignated Space Systems Division) at Los Angeles Air Force Station, California. There, he worked as a project officer from August 1960 to July 1964 on several key Air Force space programs. During that west coast assignment, he was promoted to lieutenant colonel, effective 15 July 1963. Marsh returned to Maxwell AFB from August 1964 to June 1965 to complete the Air War College. His next stop was the Air Staff. From July 1965 to June 1967, he was a staff officer in the Directorate of Space, Office of the Deputy Chief of Staff (DCS) for Research and Development (R&D), Headquarters, USAF. On 20 March 1966, Marsh was promoted to colonel. He remained in the Pentagon from July 1967 to August 1969, serving as an executive officer to the DCS/R&D. Marsh then returned to Wright-Patterson AFB from September 1969 to May 1973. There he became the Deputy for Reconnaissance, Strike, and Electronics Warfare at the Aeronautical Systems Division of Air Force Systems Command (AFSC). On 1 September 1970 Marsh put on his first star. His next duty location was Headquarters AFSC at Andrews AFB, Maryland. From June to September 1973, he served as the DCS/Development Plans and from October 1973 to July 1975 as the DCS/Systems. On 24 April 1974, he was promoted to major general. On 1 August 1975, he was elevated to lieutenant general and assumed the post of Vice Commander, Systems Command. In May 1977, Marsh became Commander of AFSC's Electronic Systems Division at Hanscom AFB, Massachusetts. He was promoted to general and assumed command of AFSC on 1 February 1981.

General Marsh was one of the new breed of technologists which the Air Force wanted to find a home for when it created a separate command for R&D in 1950. A non-rated officer whose career was associated with a number of advanced weapons systems, he epitomizes the legions of technically-competent managers-in-uniform that the Department of Defense relies upon today to develop and maintain its high technology equipment. As Commander of AFSC, he was given the responsibility for implementing the Air Force's portion of President Reagan's massive weapons-modernization program. His stewardship of Systems Command was noted for revival of long range organizational planning, an emphasis on measures to control the spiraling costs of new weapons systems, and a

concerted effort to strengthen the Air Force's technological base.

This interview was conducted at Headquarters AFSC and General Marsh's retirement home in Alexandria, Virginia on six separate occasions between July 1984 and July 1985. Although the interviews covered General Marsh's entire career, they emphasized his service as AFSC Commander and his views on various weapons acquisition policy issues. Questions for the interview were formulated with the assistance of staff officers at Headquarters AFSC and historians in Systems Command whose units had played especially significant roles in General Marsh's career. The demanding tasks of transcribing and editing the interview transcripts were completed on an overtime basis by Ms Alease Manning of the Office of the Staff Judge Advocate and Ms Joann Clapper of the Protocol Office, both of Headquarters AFSC.

General Robert T. Marsh

General Marsh was one of the first of a new breed of military officer, and his successful career testifies to the vital and central position of technology in the Air Force mission. His success in the Air Force is especially noteworthy because it confirms Air Force recognition of the contribution made by technical officers to the mission. It also demonstrates that the Air Force recognized the need for a new kind of leader --one with the scientific, managerial and technical talent and experience required to maintain the Air Force's technological superiority.

While the increased stature of technical specialists in the Air Force paralleled a similar trend in the civilian world, General Marsh's career highlights an important difference. The Air Force officer specializing in a research and development remained first and foremost a military officer. Although General Marsh maintained high standards of technical competence and advocated the use of scientific method in decision-making, he also bent those disciplines to defense problems. This is an importance difference, technology was viewed as a tool of defense--just as a fighter or bomber was a tool. In times of peace, when deterrence of conflict was the first priority, that tool assumed special significance.

General military and strategic competence, understanding of deterrence issues, and an appreciation for the unquantifiable challenges of "flying and fighting" figured prominently in

General Marsh's career. In fact, while General Marsh's career demonstrated the importance of technical officers to mission accomplishment and the need for technical officers in senior leadership positions, it also affirmed traditional avenues to success; job performance, leadership, management and other military values remained the standard.

General Marsh's legacy to Air Force Systems Command was an important one. As the AFSC commander, he was in forefront of the Air Force effort to meet the dual challenge issued by President Reagan--rebuild and modernize the U.S. armed forces and improve management of the acquisition system. General Marsh's approach to these dual responsibilities was predictably scientific; he instituted long range planning mechanisms to ensure that research efforts and development/production responded to valid Air Force needs and proceeded at an efficient rate; he energized data collection and study mechanisms to measure the command's progress toward meeting defense needs and to identify areas where improvement/change was required; and he established a broadly based command-wide program to improve the acquisition effort.

General Marsh's leadership of AFSC generated a number of significant achievements. The first-ever corporate planning process was established. This top-down planning extended throughout the command. It was designed to establish goals for the command--not functional goals, but high level goals personally endorsed by each level of command. These goals directly derived from the mission and R&D needs of the Air

Force. In a sense, the corporate planning process provided the command with a compass--a means of ensuring that it was sailing the proper course. Further, they served in a macro sense as "test" against which each program or plan could be compared to ensure that it contributed to the command and Air Force mission.

General Marsh also commissioned, with the "after-the-fact" support of the Secretary of the Air Force, an unprecedented study of the actuation process. Originally named the "Accelerated Acquisition Approach", this study sought to determine the causes of continued lengthening of the acquisition process and to assess the effects of this trend. Later, the study was re-named the Affordable Acquisition Approach study or A³. The study debunked the myth that longer acquisition times had a de-facto negative effect. Instead, it identified instability in the process as the primary driver of cost growth and schedule slippage. Technical problems and challenges, though important, were found to be less frequently the cause of cost growth. Armed with this data, General Marsh sought to establish plans for acquisition improvement.

Among the General's most significant contributions in this last area were the strong AFSC support for baselining, attempts to stabilize programs by accurately costing them and holding to a baseline, the baseline program that sought to establish an almost inviolate schedule and adhere to it, and a variety of other improvement initiatives in everything from

education and training of program personnel to important changes in profit policy.

As General Marsh's tenure approached its last year and the defense-wide acquisition improvement efforts were gaining hold, he added support for basic research to his agenda. Recognizing that the push for modernization had translated almost exclusively into increased support for development, production and deployment of new systems, General Marsh became concerned with adequate support for the technology base. His study of technology base funding trends revealed that support had eroded, largely because tech base funding was hidden within the overall RDT&E account. Based on historical precedent, General Marsh selected about two percent of the Air Force's total obligational authority (TOA) as the preliminary target level for Air Force tech base funding. He noted the level in recent years had been only one percent and launched a campaign to restore support for the technical research that yields the defense capabilities of the future. Although budget reductions in FY-86 and -87 and the transfer of several research programs to the new Strategic Defense Initiative Organization constrained his efforts, he did manage to raise Air Force concern and garnered additional support.

In a related effort, his concern with research was also evident in the "Seven Man Group" that he chartered. This team of seven of his brightest colonels was assigned the task of evaluating a host of technologies to determine those offering the greatest potential for improved defense in the

future. That very successful effort was the predecessor of larger and more extensive reviews conducted by later commanders.

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